	Application No.	Applicant(s)
Notice of Allowability	09/533,255	OTANI ET AL.
	Examiner	Art Unit	
	Joshua D Campbell	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *07/16/2004*.

2. ☒ The allowed claim(s) is/are *1-45*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

REASONS FOR ALLOWANCE AND EXAMINER'S AMENDMENT

1.   This action is responsive to communications: Request for Continued Examination filed on 07/16/2004.

2.   Claims 1-45 are pending in this case. Claims 1, 23, and 45 are independent claims. Claims 1, 23, and 45 have been amended.

3.   The Rejection of claims 1-45 under 35 U.S.C. 103(a) as being unpatentable over Winter et al. ("Microsoft Office 97 User Manual", published in 1998) in view of Pyreddy et al. (hereinafter Pyreddy, US Patent Number 5,950,196, filed September 7, 1999) have been withdrawn as necessitated by Amendment.

4.   Claims 1, 23, and 45 have been amended by the examiner, which is discussed below in the Examiner's Amendment section.

5.   Claims 1-45 are allowed as necessitated by Amendment and discussed below in the Reasons for Allowance section.

EXAMINER'S AMENDMENT

6.   An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Leonard Diana on 09/13/2004.

The application has been amended as follows:

Replace Claim 1 with:

1.   (currently amended by the examiner) A document segmentation apparatus

for segmenting a ~~list~~ <u>first</u> type <u>of</u> table<u>,</u> for ~~describing~~ <u>presenting</u> data <u>in a visual</u>

<u>tabular format,</u> or a ~~layout~~ <u>second</u> type <u>of</u> table represented between tags

defined in a language for use in composing <u>the layout of</u> web pages <u>containing</u>

<u>data that lacks tabular relationships</u>, comprising:

table analyzing means for generating cell vectors representing characteristics of

cells having at least one of row width and column width of the cells, and cell

position data indicating a positional relationship between cells, by analyzing a

table in a document to be processed;

table type judging means for judging<u>, with reference to the cell position data and</u>

<u>the cell vectors generated by said table analyzing means,</u> whether the table

analyzed by said table analyzing means is <u>either</u> a ~~list-type~~ table ~~for describing~~

~~data~~ <u>of the first type</u> or a ~~layout-type~~ table <u>of the second type</u> ~~for describing a~~

~~layout of page with reference to the cell position data and the cell vectors~~

~~generated by said table analyzing means~~;

first segment generating means for generating a plurality of segments by dividing

the table with a first method in a case in which said table type judging means

judges that the table analyzed by said table analyzing means is ~~the list-type~~ <u>a</u>

table <u>of the first type</u>; and

second segment generating means for generating a plurality of segments by

dividing the table with a second method in a case in which said table type judging

means judges that the table analyzed by said table analyzing means is ~~the layout~~

~~type~~ a table of the second type.

Replace Claim 23 with:

23.   (currently amended by the examiner) A document segmentation method

for segmenting a ~~list~~ first type of table, for ~~describing~~ presenting data in a visual

tabular format, or a ~~layout~~ second type of table represented between tags

defined in a language for use in composing the layout of web pages containing

data that lacks tabular relationships, comprising:

table analyzing step for generating cell vectors representing characteristics of

cells having at least one of row width and column width of the cells, and cell

position data indicating a positional relationship between cells, by analyzing a

table in a document to be processed;

table type judging step for judging, with reference to the cell position data and the

cell vectors generated by said table analyzing step, whether the table analyzed

by said table analyzing step is either a ~~list type~~ table ~~for describing data~~ of the

first type or a ~~layout type~~ table of the second type ~~for describing a layout of page~~

~~with reference to the cell position data and the cell vectors generated by said~~

~~table analyzing step~~;

first segment generating step for generating a plurality of segments by dividing

the table with a first method in a case in which said table type judging step

judges that the table analyzed by said table analyzing step is ~~the list type~~ a table

of the first type; and

second segment generating step for generating a plurality of segments by

dividing the table with a second method in a case in which said table type judging

step judges that the table analyzed by said table analyzing step is ~~the layout type~~

a table of the second type.

Replace Claim 45 with:

45.   (currently amended by the examiner) A computer-readable storage

medium storing a document segmentation program for controlling a computer to

perform document segmentation for segmenting a ~~list~~ first type of table, for

~~describing~~ presenting data in a visual tabular format, or a ~~layout~~ second type

of table represented between tags defined in a language for use in

composing the layout of web pages containing data that lacks tabular

relationships, comprising:

table analyzing step for generating cell vectors representing characteristics of

cells having at least one of row width and column width of the cells, and cell

position data indicating a positional relationship between cells, by analyzing a

table in a document to be processed;

table type judging step for judging, with reference to the cell position data and the

cell vectors generated by said table analyzing step, whether the table analyzed

by said table analyzing step is either a ~~list type~~ table ~~for describing data~~ of the

first type or a ~~layout type~~ table of the second type ~~for describing a layout of page~~

~~with reference to the cell position data and the cell vectors generated by said~~

~~table analyzing step;~~

first segment generating step for generating a plurality of segments by dividing

the table with a first method in a case in which said table type judging step

judges that the table analyzed by said table analyzing step is ~~the list type~~ a table

of the first type; and

second segment generating step for generating a plurality of segments by

dividing the table with a second method in a case in which said table type judging

step judges that the table analyzed by said table analyzing step is ~~the layout type~~

a table of the second type.

REASONS FOR ALLOWANCE

7.   The following is an examiner's statement of reasons for allowance:

        Regarding amended independent claim 1, none of the references, either

singularly or in combination, teach or suggest to a person of ordinary skill in the art at

the time of the invention the amended feature, "table type judging means for judging,

with reference to the cell position data and the cell vectors generated by said table

analyzing means, whether the table analyzed by said table analyzing means is either a table of the first type or a table of the second type." The examiner notes that while dividing a table into logical segments is not a novel feature (See Examiner Referenced Patents and Non-patent Literature), but in combination with the other limitations of the method steps and system functions of the independent claim (i.e. table type judging means for judging, with reference to the cell position data and the cell vectors generated by said table analyzing means, whether the table analyzed by said table analyzing means is either a table of the first type or a table of the second type.) the limitations of claim 1 are considered novel, and unobvious to a person of ordinary skill in the art at the time the invention was made in view of the prior art of record.

In regards to independent claims 23 and 45, the examiner notes that said claims are substantially similar to independent claim 1 and recite system and method versions of the same limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent Number 6,006,240

US Patent Number 6,173,073

US Patent Number 6,442,575

US Patent Number 6,496,832

US Patent Number 6,535,896

US Patent Application Publication Number 2002/0091728

US Patent Application Publication Number 2002/0124016

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joshua D Campbell whose telephone number is (571)

272-4133. The examiner can normally be reached on M-F (8:00 AM - 4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JDC
September 16, 2004

STEPHEN S. HONG
PRIMARY EXAMINER